

SBARA's Groundplane

The monthly Newsletter of the South Bay Amateur
Radio Association KU6S



Volume Number 14
November, 2013

SBARA 2014 Elections Occur during the November Membership Meeting Special

Positions for the 2014 Board of Directors (BOD) are now open for your nomination. A complete slate of officers are necessary for an effective leadership team. A number of members have shown interest in running for Elected Board so if you're asked by the nominating committee to run for office, be assured You will not be alone if you say yes.

SBARA Nominations and Elections

We are asking that members be willing to serving their amateur radio association by accepting nominations for these four elected positions. Term length is one year. Without new, energetic members serving one year in a leadership role the association cannot be effective in serving the needs of the Tri-Cities amateur radio community. Positions for the 2010 Board of Directors (BOD) are now open for your nomination. A complete slate of officers are necessary for an effective leadership team. A number of members have shown interest in running for the elected Board positions

The elected position Nominees for 2014 are:

President - Steve Wilson, KG6HJU

Vice President - Debra Patten, AG6HJ

Treasurer—Don Amyx, N6DA

Secretary - Ray Fellers, KJ6AMF

SBARA Groundplane Historical Products—Remember When?

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Now, RCA has the ultimate in VCRs. The RCA Select-A-Vision is one of the few decks that features 4-hours recording capability on one tape, plus a 20-foot pause remote switch. Hooks up in minutes to any TV set. Stop in for a demonstration today.

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NEW! THE FUTURE NOW! FM2015R



Does Your Unit Cover The New
Sub-band 144.5 - 145.5 MHz?
The FM2015R Does. PLUS MARS-CAP![®]

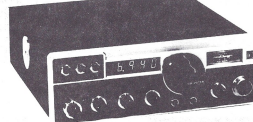
All Solid State-CMOS PL digital synthesized - No Crystals to Buy! 5KHz steps - 144-149 MHz-LED digital readout PLUS MARS-CAP and MULTIPLE OFFSET.*

- 5 MHz Band Coverage - 1000 Channels (instead of the usual 2MHz to 4MHz-400 to 800 Channels)
- 4 CHANNEL RAM IC MEMORY WITH SCANNING
- MULTIPLE FREQUENCY OFFSETS
- ELECTRONIC AUTO TUNING - TRANSMIT AND RECEIVE
- INTERNAL MULTIPURPOSE TONE OSCILLATOR
- RIT
- DISCRIMINATOR METER - 15 Watts Output - Unequaled Receiver Sensitivity and Selectivity
- 18 POLE FILTER, MONOLITHIC CRYSTAL FILTER AND AUTOMATIC TUNED RECEIVER FRONT END, COMPARE! Superb Engineering and Superior Commercial Avionics Grade Quality and Construction Second to None at ANY PRICE.

INTRODUCTORY
PRICE

\$419⁰⁰

Regulated AC/PS
Model FM2015R-41... \$39.98



- **FREQUENCY RANGE:** Receive and Transmit 144.00 to 148.995 MHz, 5KHz steps 1000 channels INCLUDING NEW BAND 144.5 - 145.5 MHz - MARS-CAP and MULTIPLE OFFSET.*
- **LED DIGITAL READOUT**
- **4 CHANNEL RAM SCANNER WITH IC MEMORY:** Program any 4 frequencies and hopping sequence using the 4000 channel controls-search for occupied (closed) channel or vacant (open) channels. Internal IC-CAP included to retain memory (no data matrix to wire or change).
- **MULTIPLE FREQUENCY OFFSETS:** Three positions A.B.C. provided for installation of optional crystals. EXAMPLE: 1 MHz offset. Duplex Frequency Offset Built-in. 600 Hz PLUS or MINUS 5 KHz steps, plus simplex, any frequency.
- **INTERNAL MULTIPURPOSE TONE OSCILLATOR BUILT IN:** 1700Hz tone built for "whistle" operation. One 800-Hz tone operation possible by simply adding a capacitor across the terminals provided. Includes 3 speaker outputs for automatic and manual operation. Tone burst or auto suitable tone PL - adjustable 50-200Hz (500 Hz provided).
- **AIRCRAFT TYPE FREQUENCY SELECTOR:** Large and small capacity. Mounted. Analog select. 100KHz and 100Hz, (steps respectively). Switches click stopped with a home position facilitate frequency changing without need to view LED's while driving and provides the "highway amateur" with full Braille dial as standard equipment.
- **PLL AUTOMATIC TUNING OF RECEIVER FRONT END AND TRANSMITTER CIRCUITS:** DC output of PLL fed to varactor diodes in all front and RF tuned circuits provides full automatic and optimum intermodulation rejection over the entire band. APC/AUTO POWER CONTROL - keeps RF output constant from band edge to band edge. NO OTHER AMATEUR UNIT AT ANY PRICE has these

- features which are found in only the most sophisticated and expensive aircraft and commercial transceivers.
- **TRUE FM:** Not phase modulation - for superb emphasized hi-fi audio quality second to none.
- **RIT CONTROL:** Used to improve clarity when contacting stations with high frequency drift.
- **MONITOR LAMPS:** 2 LED's on front panel indicate (1) incoming signal strength and (2) transmit.
- **FULLY REGULATED INTEGRAL POWER SUPPLY:** Operating voltage for all IC circuits independently regulated. Massive Commercial Heat Sink.
- **MODULAR COMMERCIAL GRADE CONSTRUCTION:** 6 United modules eliminate stray coupling and facilitate ease of maintenance.
- **ACCESSORY SOCKET:** Fully wired for touch tone, phone patch, and other accessories. Internal switch connects receiver output to external speaker when connected & not in use.
- **MULTI-PURPOSE METER:** Triple Function Meter. Provides Discriminator Meter, "S" Reading on receive and Power Out on transmit.
- **RECEIVE:** Better than 25db sensitivity. 18 POLE FILTER as well as monolithic crystal filter and AUTOMATIC TUNED LC circuits provide superior selectivity - COMPARE!
- **HIGH/LOW POWER OUTPUT:** 15 watts and 1 watt switch selected. Low power may be adjusted anywhere between 1 and 15 watts. Fully protected against open SWR.
- **OTHER FEATURES:** Dynamic Microphone built in speaker, mobile mount, external 5 pin accessory jack, speaker jack, and much, much more. Size 2 1/2" x 7 1/2". All cords, plugs, fuses, microphone hanger, etc. included. Weight 5 lbs.

Model 11 - Microphone with Built-in Touch Tone Pad
WANT BUY LESS? THIS FM2015R HAS IT ALL!
• Best looking rig
• Best performance
• All test and time tested
• One microphone
• Only 2 1/2" x 7 1/2"

Manufactured by one of the world's most distinguished Avionics manufacturers, Kyokuto Denchi Kaisha, Ltd.
First in the world with an all solid state 2 meter FM transceiver.

A Giant Misalignment in a Multiple Planet

Scientists have discovered a cause for a planetary system whose star tilts some 45° from the plane of the orbit of its planets.

By NASA Headquarters, Washington, D.C. |

Published: Monday, October 21, 2013

Graphical sketch of the Kepler-56 system. The line of sight from Earth is illustrated by the dashed line, and dotted lines show the orbits of three detected companions in the system. The solid arrow marks the rotation axis of the host star, and the thin solid line marks the host star equator.

NASA GSFC/Ames/D Huber Using data from the NASA's Kepler space telescope, an international research team led by Daniel Huber from NASA's Ames Research Center in Moffett Field, California, studied Kepler-56, a red giant star four times larger than the Sun located at a distance of approximately 3,000 light-years from Earth. By analyzing the fluctuations in brightness at different points on the surface of Kepler-56, Huber and his collaborators discovered that the star's rotation axis is tilted by about 45° to our line of sight. "This was a surprise because we already knew about the existence of two planets transiting in front of Kepler-56. This suggested that the host star must be misaligned with the orbits of both planets," said Huber. "What we found is quite literally a giant misalignment in an exoplanet system."

From the Editor

Welcome to another edition of the Groundplane.

Outdoor time is winding down for us, so we turn our attention to indoor amateur radio projects. What projects are you planning? Cleaning up your shack? Building a new electronic device? Exploring a new mode?

Keep the Groundplane in mind as you do your winter projects and write a quick article about what you are doing. A picture or two can also help tell the story. If you took the time to do the project, others will enjoy reading about it. Don't think you must be an expert, just write about what you did, how you did it and how it turned out. If you need help writing a finished article, let me know. And remember, failures are instructional, too, so if you had problems, tell us about those as well. Your article might just be the inspiration someone else needs to do their project (and article!).

William

Editor, Groundplane

Exam sessions are conducted by SBARA VE volunteers working under the direction of the FCC. There is a charge for taking the exam. The exam fee is set by the Volunteer Exam Coordinator. SBARA's Fee is \$15.00

SBARA VE Testing Schedule

Exams will be administered at Hurricane Electric, 48233 Warm Springs Blvd., Fremont. Contact: Greg Miller, wy6p at arrl dot net for info. \$15 fee, bring a photo ID. Walk-ins allowed.



Tri-City VE Session Dates 2013

Sat Sep 14, 2013, 9:00 am – 11:30 am

Tue Oct 8, 2013, 6:30 pm – 9:00 pm

Sat Nov 9, 2013, 9:00 am – 11:30 am

Tue Dec 10, 2013, 6:30 pm – 9:00pm

South Bay Amateur Radio Club conducts FCC authorized tests for Technician, General, and Extra class licenses every month on the 2nd Saturday at Hurricane Electric 48233 Warm Springs Boulevard Fremont, CA. 9453. Hurricane Electric Doors open at 8:45 AM. We begin testing about 9:00 AM. Enter through the main building entrance and then go to up the stairs to the second floor or use the elevator. Then go to the right and look for the Amateur Radio testing exam signs. We do ask that you park your car in the main parking lot not directly in front of the Main doors to Hurricane Electric.

Our next test session will be held Saturday September 14, 2013 (9:00 AM to 11:00 AM).

Very important: Please remember to bring the following items with you to any exam session: The appropriate fee - cash only (currently \$15) for the test. Please bring your picture ID, the original and a copy of your Amateur Radio license (if licensed), and calculator if you would like to use one (all memories must be cleared). It is very important to have your Social Security Number, or if you have been issued an FRN (Federal Registration Number) from the FCC, please use that in place of your SSN because without either your SSN or FRN, the FCC will not process your application. If you are upgrading please bring all CSCE's and a copy showing proof of recent passed exam if not already processed by the FCC.

If you have any Questions regarding our test session or Questions about upgrading, please contact me - via email at: wy6p at arrl dot net

Again - The test fee is still \$15.00 (cash only -- no credit cards or checks).
73's AL – Greg WY6P

SBARA Weekly Nets—Voice and CW Action!!

The SBARA Net Meets....

Every Monday night at 7:30 pm on the WA6PWW (currently N6IMS) repeater, 147.015 MHz, positive offset, PL (if enabled) 103.5 Hz.

projects you're working on and so on. It's a chat net.

We need net control operators. If you'd like to be net control, let us know during the next net.

Bernhard AE6YN

Topics are club related things, —... —

The Slow CW Net Meets....

Every Thursday and Sunday night at 7:30 pm, Thursday on 144.230 MHz
Sunday on 7.057MHz +/- 3 kHz

not just an FM) radio in order to follow. groups.com>

The net has now its own e-mail address. Please contact us here:

—... —

Bernhard AE6YN

You need an “allmode” (i.e.

“SF Bay CW Enthusiasts” <sf-bay-cw-enthusiasts at google-

Repeater Information

WA6PWW— 147.015 + 600Khz, PL 103.5

500Khz, PL 107.2

123.0

WA6PWW—223.900—

WA6PWW—442.600 +5Mhz, PL107.2

K6AIR—441.525 +5Mhz, PL 123.0

K6AIR—146.940—600Khz, PL

Helpful Amateur Radio Web Page Links

www.sbara.org

www.arrl.org

www.qrz.com

www.eham.net

www.twit.tv/hn

Upcoming SBARA Events

SBARA - Groundplane

The Groundplane is published monthly by the South Bay Amateur Radio Association. Articles and letters are always welcome. The normal deadline for material is the 20th day of each month for the next month's news-letter. Articles can be sent by email to hamradio at Comcast dot net or via U.S. Mail. Contact the Editor for details and submission guidelines.



November 8th, 2013 at 7:30pm
Hurricane Electric, Fremont

Amateur License Exams

ARRL VEC– September 14th @ 9:30 am
at Hurricane Electric – 48233 Warm
Springs Blvd. Fremont.

Contact: Greg Miller, wy6p at arrl dot net
for info. \$15 fee.

South Bay Amateur Radio Association — SBARA
The Ground Plane — KU6S
<http://www.sbara.org>
P.O. Box 8401
Fremont, Ca.

PLEASE
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